難関国公立大　英語

この講座は，地方国公立〜旧帝大を想定した難関大学を志望する生徒のための講座です。

夏期講習でも何も変わらないのが，根本の英語力を底上げすること。それには，予習→授業→復習のサイクルと，復習の際の音読十回と単語の暗記です。

一方で，それに加えて，難関大学で頻出の自由英作文も扱います。自由英作文の基本は扱わないので，講義を受ける前に，高３トップ＆ハイレベル英語〜英作文編〜第４講　自由英作文編の序章を使用して，自由英作文の型を学んできてください。

肘井　学

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第１講　難関国公立大英語長文①

ポイント

【1】具体の発見
【2】抽象の発見
【3】パラフレーズの発見

次の英文を読んで，以下の問いに答えよ。

Natural selection occurs because of the reproductive advantages of some individuals. This view of the world implies that all individuals are in competition with each other and will behave to (1) further their own interests. From a philosophical viewpoint, the idea that the world is full of selfish individuals clashes with many of the values we hold for human societies, such as cooperation, community spirit, and selflessness. Does the variety of behaviors that we observe in animals, even the (2) apparently cooperative ones, really arise from the interactions of selfish individuals? Can traits evolve that favor the larger interests of a group or society? Does evolution lead only to selfishness? These are key questions that interest social scientists, philosophers, and biologists. (a) Biologists do not think that individuals ever act for the good of the species, but there are many situations in which what appear to be selfish individual behaviors actually benefit a group.

It is easy to imagine that populations of selfish individuals might overexploit the available resources and become extinct, whereas populations that have evolved social behaviors preventing overexploitation of resources

might have better long-term survival prospects. Natural selection for traits that favor groups rather than individuals is termed group selection.

NOTE

The idea that groups of animals could evolve self-regulating mechanisms that prevent overexploitation of their food resources was first argued in detail in 1,962 by (b) <u>V. C. Wynne Edwards</u>, an ecologist in Scotland. Despite its intuitive appeal, group selection is not considered very important in producing changes in species traits. Group selection operates much more slowly than individual selection, making it a much weaker selective force in most circumstances.

Imagine, for example, a species of bird, such as the puffin that lives in large colonies and lays only a single egg. Could laying a single egg have evolved in puffins by group selection to limit population growth and maintain an adequate food supply for the long-term good of the puffin colony? The answer is no. Any genetic change that increased the number of eggs laid would be favored only if individuals laying two eggs leave more copies of their genes to the next generation, compared with birds laying a single egg. But ecologically speaking, costs would increase as well as benefits. A puffin with two eggs would have to collect more calcium to lay two eggs and would have to fly more to feed two young. There are ecological costs to increasing (3) <u>the clutch size</u> in puffins. Consequently, genes for laying two eggs would not spread through the population unless the benefits would exceed (c) <u>the costs</u>.

NOTE

Individual selection favors the small clutch size in puffins. Short-term advantages to selfish individuals will develop much more quickly than long-term advantages to the group, so it is difficult to see how traits favored by group selection can be maintained in a population unless they are also favored by individual selection.

But this does not mean that all behavior must be selfish and that (4) altruism does not exist. To understand apparently cooperative behaviors that benefit the group or society, we need to look for the benefits to individuals. Individual selection can produce behaviors that are a benefit for the group.

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NOTE

問１　下線部（1)～(4）の語（句）の本文中での意味に最も近い表現を，下からそれぞれ一つ選び，記号で答えなさい。

（1）further

（あ）control　（い）promote　（う）separate　（え）throw away

（2）apparently

（あ）certainly　（い）clearly　（う）oddly　（え）seemingly

（3）the clutch size

（あ）the amount of available food resources

（い）the distance of flight required to obtain food

（う）the quantity of eggs laid in a single nest

（え）the size of a colony in one area

（4）altruism

（あ）egoism　（い）helplessness

（う）individualism　（え）selflessness

問２　下線部（a）を日本語に訳しなさい。

問３　下線部（b）の V. C. Wynne Edwards の考えはどういうものか，50字以内の日本語で説明しなさい。ただし，句読点も１字に数えます。

問４　下線部（c）の具体例を50字以内の日本語で書きなさい。ただし，句読点も１字に数えます。

復習テスト　　第１講

＊次の見出し語（句・文）に合う選択肢を選びなさい。

1. 自然淘汰
   ① human selection　② individual selection
   ③ natural selection　④ group selection

2. 競争
   ① company　② competition　③ cooperation　④ completion

3. 関わり合い
   ① interception　② intersection
   ③ international　④ interaction

4. 進化する
   ① evolve　② envy　③ involve　④ revolve

5. 利己的な
   ① altruism　② serene　③ selflessness　④ selfish

6. 利他主義
   ① altruism　② serene　③ egoism　④ selfish

7. 絶滅した
   ① extravagant　② exploitation　③ extinct　④ extrovert

8. 仕組み
   ① momentous　② mechanism　③ meaning　④ mentality

9. 維持する
   ① contain　② certain　③ entertain　④ maintain

第２講　難関国公立大英語長文②

ポイント

【1】対比の発見①
【2】抽象の発見
【3】対比の発見②

次の英文を読んで，問に答えなさい。

Everybody wants to eat delicious and safe food. However, exposure to different cultures reveals how people's attitudes towards food safety and taste are not all innate or biological. Assumptions and practices regarding the preparation and presentation of food highlight the influence of culture on what and how people eat. (1) For example, in one culture, some kinds of fresh ingredients might be considered edible（　a　）, that is, without any kind of preparation like washing, peeling or heating. Yet in another culture, the same foodstuff may require some kind of preparation before it can be eaten.

It is often difficult for people from the same culture to view such activities and beliefs objectively, and so witnessing the food practices of other cultures can be surprising. *Sashimi* is a great example of this. While *sashimi* may be the result of several steps of preparation — from cleaning and cutting, to a particular style of presentation — heating is not one of these steps. (2) Japanese consumers take it for granted that the quality of *sashimi* is directly related to the fact that it is raw. By contrast, in other cultures, the conventional belief may be that meat and fish require some sort of cooking, such as baking or frying, (3) in order（　b　）them to be considered edible. In

these cultures, *sashimi* is not thought of as raw, delicious and safe to eat, but rather as uncooked, and therefore possibly unsafe to eat, regardless of how it may taste. Fresh chicken eggs are another raw foodstuff commonly eaten in Japan — as a topping for rice, or as a dipping sauce for *sukiyaki*, for example — but most people in the UK or the USA believe that chicken eggs require some kind of heating before they are fit for human consumption.

NOTE

However, the ways in which people from other cultural backgrounds eat certain foods might be considered equally unconventional by many Japanese. For example, few Japanese would eat the skin of apples or grapes. In this case, the difference involved in the preparation of the food is not the use of heat, but the removal of part of the foodstuff. People in much of the world eat apples and grapes without peeling them. A European might think, (4)'What could be more healthy and delicious than picking an apple from the tree and eating it?' But this way of thinking is not shared by a large number of Japanese.

It is clear that different cultures have different conventions regarding the preparation of particular foods, and different beliefs about what is considered delicious. However, there is no question that some common food preparation practices — or sometimes a lack of certain food preparation processes — are unsafe from a scientific point of view. However delicious they may be, raw meat and fish can contain the eggs of harmful parasites like tapeworms, which are often undetectable. If chicken eggs are not properly stored, and are left unconsumed for a long time, they can easily produce bacteria like salmonella.

NOTE

The poisoning caused by salmonella does not usually require hospitalization, but it can be very dangerous for young children and elderly people. In addition, while eating the skin of apples and grapes may be a good source of dietary fiber, one also runs the risk of consuming insecticides, the poisons that are used to protect many non-organically farmed fruits from insects. So, while there may be ‘no accounting for taste’ beyond culture, safety is a different issue, and (5) we should always be aware of the risks involved with culturally accepted methods of food production and consumption.

［2016 年度　北海道大学］

NOTE

問１　下線部（1）で，空欄（　a　）に入る最も適切な語句を，(A)～(D）から選び，記号で答えなさい。

(A) as is clear　　(B) as is fresh　　(C) as they are　　(D) as unclean

問２　下線部（2）を日本語に訳しなさい。

問３　下線部（3）の空欄（　b　）に入る語（1 語）を書きなさい。

問４　下線部（4）を日本語に訳しなさい。

問５　下線部（5）の理由として最も適切なものを，(A)～(D）から選び，記号で答えなさい。

(A) Eating raw chicken eggs or unpeeled fruits can be dangerous in certain conditions because of harmful bacteria or pesticides.

(B) Eating unpeeled apples or grapes may cause weight gain.

(C) Only young children and elderly people are vulnerable to particular bacteria.

(D) Beliefs about what is considered delicious actually come from better understanding of food preparation.

問６　本文の内容と一致するものを，(A)～(G) から３つ選び，記号で答えなさい。

(A) By food preparation processes, the author exclusively means the use of heat.

(B) Culturally established ways of consuming food may conflict with scientific principles of food safety.

(C) In some food cultures outside Japan, fish in its raw state is not categorized as an edible foodstuff.

(D) People having little contact with other cultures tend to view their own food-related conventions as natural and standard.

(E) Repeated exercise is required for the mastery of any food preparation.

(F) Instinct alone determines what and how people eat.

(G) All cultures around the world consider it natural to eat unpeeled fruit.

復習テスト　　第２講

＊次の見出し語（句・文）に合う選択肢を選びなさい。

1. さらされること

① expedition　② experiment　③ experience　④ exposure

2. 先天的な

① innate　② temperate　③ operate　④ alternate

3. 目撃する

① weed　② wellness　③ witness　④ warning

4. 〜を当然と思う

① pay attention to 〜　② learn 〜 by heart

③ take 〜 for granted　④ divide 〜 into

5. 客観的に

① objectively　② subjectively　③ respectively　④ deceptively

6. 食べられる

① eligible　② abdominal　③ acceptable　④ edible

7. 消費

① contemplation　② consumption

③ collaboration　④ communication

8. 有機的に

① responsively　② immediately

③ mechanically　④ organically

9. 含む

① retain　② contain　③ detain　④ entertain

第３講　難関国公立大英語長文③

ポイント

【1】直読法
【2】注意すべき対応表現
【3】抽象の発見

次の英文を読んで，問に答えなさい。

Here's a common experience for motorists: you are driving somewhere new and you're late. As you drive down unfamiliar roads it seems that everything is conspiring* against you: other cars, layout, the traffic lights and even suicidal cyclists. You know it's only a few more miles, but it seems to be taking forever.

Psychologically there are all sorts of things going on to make the journey seem（　ア　）than it really is, but let's just isolate one of those: the unfamiliarity of the route.

Unknown routes peak our curiosity; they are filled with new names, landscapes and landmarks, all of which attract the interest. (1) The fact that our attention is engaged with all this newness has a subtle effect on how much time we think has passed.

To see why, let's take the opposite perspective for a moment. Think about driving a route that's very familiar. It could be your commute to work, a trip into town or the way home. Whichever it is, you know every twist and turn like the back of your hand. On these sorts of trips it's easy to zone out from the actual driving and pay little attention to the passing scenery. The

consequence is that you perceive that the trip has taken less time than it actually has.

NOTE

This is (2) <u>the well-travelled road effect</u>: people tend to underestimate the time it takes to travel a familiar route. The corollary* is that unfamiliar routes seem to take（　イ　）.

The effect is caused by the way we allocate* our attention. When we travel down a well-known route, because we don't have to concentrate much, time seems to flow more quickly. And afterwards, when we come to think back on it, we can't remember the journey well because we didn't pay much attention to it. So we assume it was proportionately（　ウ　）.

The well-travelled road effect has an odd consequence. When you estimate how long it takes to travel a familiar route, typically you'll underestimate it. Because of its familiarity the travelling time feels（　エ　）than it really is. This means that when you travel a familiar route, [　A　], you're more likely to be late.

Actually the well-travelled road effect is a specific example of the fact that we tend to underestimate how long routine activities take. (3) <u>Or, put the other way around: time seems to fly when we're engaged in automatic, routine tasks.</u>

This means that people often find the last part of their holiday tends to go quicker than the first part. That's because as the holiday goes on, we settle into a routine, so time seems to go quicker towards the end.

NOTE

The same happens at work, where people report routine activities as taking proportionately（　カ　）time than those that require（　キ　）deliberate, conscious attention.

［　B　］, then, with routes travelled, holidays and work activities, tends to speed up our perception of time.

Maybe this all helps explain why the latter parts of our lives — which are（　ク　）likely to be filled with routine, predictable events — seem to skip by much quicker than our earlier years. As the roads of our lives become well-worn we take（　ケ　）notice of the landscape.

One way to avoid this is to expose yourself to more unexpected, unpredictable experiences...but probably not being late and getting stuck in traffic.

*conspire against 不利に働く　　　*corollary 容易に引き出せる結論

*allocate 分散する

［The Well-Travelled Road Effect: Why Familiar Routes Fly By Jeremy Dean, PsyBlog.］

NOTE

問 1　下線部（1），（3）を日本語に訳しなさい。

問 2　下線部（2）が表す内容を，日本語で述べよ。

問 3　［　A　］に入る表現として最も適切なものを下から選び，番号で答えなさい。

① as it is easy to adjust yourself to this effect

② in spite of not paying much attention to the scenery

③ unless you pay much attention to the scenery

④ unless you adjust for this effect

問 4　［　B　］に入る最も適切な語を下から選び，番号で答えなさい。

① Effect　② Proportionately　③ Routinely

④ Familiarity　⑤ Unpredictably

問 5　空所（　ア　）～（　エ　）に入る最も適切な語を下から選び, 番号で答えなさい。同じ語を繰り返してもよい。

① longer　② shorter

問６　空所（　カ　）〜（　ケ　）に入る最も適切な語を下から選び，番号で答えなさい。

同じ語を繰り返してもよい。

① more　　　　　② less

復習テスト　　第3講

＊次の見出し語（句・文）に合う選択肢を選びなさい。

1. 孤立させる

① isolate　② obsolete　③ penetrate　④ desperate

2. 好奇心

① ideality　② identity　③ opportunity　④ curiosity

3. 微かな

① entitle　② belittle　③ subtle　④ metal

4. 反対の

① illiterate　② opposite　③ literate　④ moderate

5. 通勤

① remote　② moral　③ immoral　④ commute

6. 景色

① scenery　② ascertain　③ resurgence　④ divergence

7. 結果

① revenge　② divert　③ consequence　④ ecstasy

8. 過小評価する

① overestimate　② undercover

③ overflow　④ underestimate

9. 比例して

① periodically　② parentally　③ penalty　④ proportionately

第４講　自由英作文演習

ポイント

|
|---|
| **【1】ボクシングは危険なスポーツか** |
| **【2】本の効用** |
| **【3】オリンピック開催の功罪** |
| **【4】不老不死** |

＊第４講の授業に入る前に，スタディサプリの**高３トップ＆ハイレベル英語～英作文編～　第４講　自由英作文編の序章**を見てきてください。

ポイント【1】ボクシングは危険なスポーツか

Although boxing has a history of over a hundred years as an Olympic sport, some people argue that boxing and other sports based on physical violence should have no place in the Olympics. Do you agree with this statement? Write a paragraph giving one or more convincing reasons to support your position.（less than 100 words）

NOTE

● ボクシングのマイナス

・道徳面

ボクシングは，通常スポーツとして認識されているが，相手を倒すことを目的としているので，道徳的に問題であること。

Generally boxing is recognized as a sport. However, its objective is to knock down opponents. It is morally inappropriate.

・健康面

顔に傷を負ったり，脳に損傷を負ったり，骨折や，命を落とすこともある。

Boxers may suffer from facial injuries, brain damage, and broken bones. They could also die.

● ボクシングがもたらす利点

・スラム脱出論

スラム街で貧しい生活から抜け出す正当な手段の一つが，ボクシングである。過去に，スラム街出身で世界チャンピオンになったボクサーもいる。

One of the legitimate ways to get out of slum lives is boxing. Some boxers from such areas became the world champion.

・自由主義論

ボクシングのリスクを承知の上で, 自発的に選んでいるのならば, 許されるべきだ。というのは，そういった活動を禁止することは，我々の自由と幸福に干渉することになるからだ。

If we voluntarily decide to take up boxing despite knowledge of risks, we should be allowed to do so. Otherwise, our freedom of choice and welfare would be limited.

ポイント【2】本の効用

Today, young people tend to read fewer books than forty years ago. Suppose this is correct. What are the causes? What are the negative aspects of this tendency? State your opinion in English with specific examples.

(less than 100 words)

NOTE

● 本の利点

・多くの専門的な情報を簡単に知ることができる。安価で，時間もかからずに，貴重な情報を手にすることができる。

We can easily obtain much technical information from books. It takes little time or money to get valuable information.

・一冊の本を読むだけで，誰かの一生を知り，さらに空想の世界を味わうことができる。

One book alone can tell us about someone's entire life. Another lets us experience an imaginary world.

● 本にとって代わるもの

・インターネットで，膨大な情報を入手できる。本よりも速くお金もかからずにより多い情報を入手できる。

We can get more information faster and cheaper on the Internet than from books.

・テレビ，映画，インターネットのように，映像で見ることで，本より楽しむことが出来る。

Watching videos on such media as TV, movies and the Internet is more fun than reading books.

ポイント【3】オリンピック開催の功罪

What is one of the possible advantages and one of the possible disadvantages for Japan in hosting the Tokyo Olympics in 2020? (less than 70 words)

NOTE

● オリンピック開催のメリット

・経済の活性化

観光客が，チケット，宿泊費や飲食などでお金を使う。

Many tourists will use money in Japan, for example, to buy the tickets, to eat and drink, and to use accommodation facilities.

・インフラの整備

公共交通機関などのインフラを整備することで，大会の後も，経済が活性化する。

Infrastructures, such as public transportation systems will be improved to host competitions. It will help to boost the economy after the Olympics.

・広告効果

オリンピック開催で，その都市や地域が世界的に有名になる。

Cities and other areas will be known around the world by hosting Olympic competitions.

オリンピック開催のおかげで，観光客が増加する。

The number of tourists to Japan will increase thanks to the Olympics.

● オリンピック開催のデメリット

・開催するのにお金がかかりすぎる

過去のオリンピック開催地の多くが，多額の借金を抱えて，返し終わるのに何年もかかっている。

In the previous Olympics, many cities borrowed huge amounts of money to host the Games. It took years to repay the debts.

・大会後に施設が利用されない

大会が開催される数週間の利用だけで，その後に施設が利用されない。

Some facilities built for the Olympics were used only for a few weeks during the Games. They have rarely been used after that.

ポイント【4】不老不死

Read the statement below and write a paragraph giving at least two reasons why you agree or disagree with it. Write your answer in English in the space provided on your written answer sheet.（less than 100 words）

“People would be happier if they could live forever.”

NOTE

● 不老不死のメリット

・長い間生きることで，多くの経験をすることができる。色んな人に出会い，いろんな場所を訪れることができる。

If we could live forever, we could have a whole range of experiences, meet all sorts of people and go everywhere.

・死や老いへの恐怖がなくなる。

We would not be afraid of death or old age.

● 不老不死のデメリット

・人生が有限だから，達成感を感じて幸せになることができる。もし永遠に生きられるなら，今に感謝や感動ができなくなる。

We can feel satisfied and happy because our lives are finite. If we could live forever, we would not feel thankful or moved.

・自分の家族，友人が自分より先に必ず亡くなる。多くの喪失の悲しみを抱くことになる。

We would have to face the deaths of our family members and friends.

第１講　解答

<解答>

問１　(1) い　(2) え　(3) う　(4) え

問２　全訳の下線部を参照。

問３　動物の集団が，食糧資源の過剰搾取を防ぐ自己規制の仕組みを進化させる可能性があるという考え。(45 字)

問４　二つ卵を産むのに，より多くのカルシウムを蓄え、二羽のひなを育てる為に、より多く飛ぶ必要があること。(49 字)

<全訳>

自然淘汰は，一部の個体が生殖上の利点を持つために起こる。この世界観には，あらゆる個体がお互いに競争していて，自分自身の利益を追求するように振る舞うという考えがある。哲学的観点からは，世界が利己的な個体で満ちているという考えは，協力，共同体意識，無私無欲のような人間社会にある価値観の多くと衝突する。私たちが動物の社会で観察する類の行動は，一見協力的な行為ですら，実際は利己的な個体の相互作用から生じるのか。集団や社会というより大きな利益を好む習性は進化できるのか。進化は利己心にしかつながらないのか。これらは，社会科学者，哲学者，そして生物学者の関心を集める重要な問題である。生物学者は，個体が種の利益のために行動することは決してないと考えているが，個体の利己的な行動に見えるものが，実際には集団に利益をもたらす状況はたくさんある。

利己的な個体は利用できる資源を過剰に搾取して絶滅するかもしれないが，一方で資源の過剰搾取を防ぐ社会的行動を進化させた個体は，より長く生存する可能性があるかもしれないと想像するのは容易いことだ。個体より集団を好む習性を表す自然淘汰は，群淘汰と呼ばれている。動物の集団が食糧資源の過剰搾取を防ぐ自己規制の仕組みを進化させるという考えは，1962 年に，V.C. ウィン・エドワーズというスコットランドの生態学者が，初めて詳細に主張した。群淘汰には直観的な魅力があるのだが，種の習性の変化を生み出すのにそんなに重要だと見なされていない。群淘汰は，個体の淘汰よりずっとゆっくり進み，ほとんどの状況で，その力をずっと弱いものにしている。

たとえば，大きなコロニーの中で生息し，一つしか卵を産まないパフィンのような鳥の種を想像してみよう。一つしか卵を産まないことによって，個体の増加を制限し，コロニーの長期にわたる利益のために適切な食料供給を維持する群淘汰によって，パ

フィンは進化できただろうか。答えはノーだ。産み落とす卵を増やすどんな遺伝的な変化であれ，好まれるのは，一つしか卵を産まない鳥と比べて，二つの卵を産む個体が，より多くの遺伝子のコピーを次の世代に残した場合のみだ。しかし，生態学的に言うと，利益だけではなく，犠牲も増えるだろう。二つの卵を産むパフィンは，その卵を産むのに，より多くのカルシウムを集めなければならないし，二羽のひなを育てるのに，より多く飛ばなければならないだろう。パフィンの一回当たりの生産繁殖体数を増やすのに，生態学的な犠牲が存在する。結果として，二つの卵を産む遺伝子は，利益が犠牲を上回らない限り，世代を超えて広がることはないだろう。個体の淘汰は，パフィンのわずかな生産繁殖体数を好む。利己的な個体への短期間の利益は，集団に対する長期間の利益よりずっと早く発達するだろうから，その習性が個体淘汰に好まれない限りは，群淘汰が好む習性が，個体群の中で維持される様を見るのは難しい。

　しかしこのことは，あらゆる行為が利己的で，利他が存在しないことを意味するのではない。社会や集団のためになる，一見すると協力的な行為を理解するには，個体への利益を探す必要がある。個体淘汰は，集団の利益となる行動を作り出すことができる。

第１講　重要語彙リスト　　＊一つ一つ何度も繰り返して，覚えてください

1	natural selection	自然淘汰
2	reproductive	生殖の
3	imply	～という意味（考え），含む
4	competition	競争
5	further	～を促進する
6	interest	利益
7	philosophical	哲学の
8	selfish	利己的な
9	clash	衝突する
10	community spirit	共同体意識
11	apparently	一見すると
12	arise from	～から生じる
13	trait	習性
14	evolve	進化する
15	good	利益
16	available	利用できる
17	extinct	絶滅した
18	whereas	一方で
19	prospect	見通し
20	mechanism	仕組み
21	argue	主張する
22	in detail	詳細に
23	ecologist	生態学者
24	intuitive	直観的な
25	operate	働く
26	colony	コロニー
27	adequate	十分な
28	genetic	遺伝的な
29	generation	世代
30	compared with	～と比べると
31	cost	犠牲
32	consequently	結果として
33	gene	遺伝子
34	unless ～	～しない限り
35	altruism	利他主義

第１講　音読用白文　①　②　③　④　⑤　⑥　⑦　⑧　⑨　⑩

Natural selection occurs because of the reproductive advantages of some individuals. This view of the world implies that all individuals are in competition with each other and will behave to further their own interests. From a philosophical viewpoint, the idea that the world is full of selfish individuals clashes with many of the values we hold for human societies, such as cooperation, community spirit, and selflessness. Does the variety of behaviors that we observe in animals, even the apparently cooperative ones, really arise from the interactions of selfish individuals? Can traits evolve that favor the larger interests of a group or society? Does evolution lead only to selfishness? These are key questions that interest social scientists, philosophers, and biologists. Biologists do not think that individuals ever act for the good of the species, but there are many situations in which what appear to be selfish individual behaviors actually benefit a group.

It is easy to imagine that populations of selfish individuals might overexploit the available resources and become extinct, whereas populations that have evolved social behaviors preventing overexploitation of resources might have better long-term survival prospects. Natural selection for traits that favor groups rather than individuals is termed group selection. The idea that groups of animals could evolve self-regulating mechanisms that prevent overexploitation of their food resources was first argued in detail in 1,962 by V. C. Wynne Edwards, an ecologist in Scotland. Despite its intuitive appeal, group selection is not considered very important in producing changes in species traits. Group selection operates much more slowly than individual selection, making it a much weaker selective force in most circumstances.

Imagine, for example, a species of bird, such as the puffin that lives in large colonies and lays only a single egg. Could laying a single egg have evolved in puffins by group selection to limit population growth and maintain an adequate food supply for the long-term good of the puffin colony? The answer is no. Any genetic change that increased the number of eggs laid would be favored only if individuals laying two eggs leave more copies of their

genes to the next generation, compared with birds laying a single egg. But ecologically speaking, costs would increase as well as benefits. A puffin with two eggs would have to collect more calcium to lay two eggs and would have to fly more to feed two young. There are ecological costs to increasing the clutch size in puffins. Consequently, genes for laying two eggs would not spread through the population unless the benefits would exceed the costs. Individual selection favors the small clutch size in puffins. Short-term advantages to selfish individuals will develop much more quickly than long-term advantages to the group, so it is difficult to see how traits favored by group selection can be maintained in a population unless they are also favored by individual selection.

But this does not mean that all behavior must be selfish and that altruism does not exist. To understand apparently cooperative behaviors that benefit the group or society, we need to look for the benefits to individuals. Individual selection can produce behaviors that are a benefit for the group.

第２講　解答

※掲載内容について　本書に収録された解答・解説はスタディサプリが独自に作成したものです

＜解答＞

問１　(C)　　問２　全訳の下線部（2）を参照。　　問３　for

問４　全訳の下線部（4）参照。　　問５　(A)　　問６　(B), (C), (D)

＜全訳＞

　みんなが美味しくて安全な食事を食べたい。しかしながら，様々な文化に触れることで，食の安全や好みに対する人々の考え方が，先天的，あるいは生物学的ではないということが明らかになる。食料の準備や盛り付けに関する思い込みや慣習は，文化が人の食べ物や食べ方に影響を与えているということを明らかにする。例えば，ある文化では，ある種の新鮮な食材がそのままで食べられる，すなわち，洗ったり，皮をむいたり，熱したりするような準備をしないと思われているかもしれない。しかし，別の文化では，同じ食料を食べる前に，ある種の準備をするかもしれない。

　同じ文化の人々がそのような行いや考えを客観的に見ることはたいてい難しいので，他の文化の食習慣を見ると，驚く可能性がある。刺身はこの格好の例となる。刺身は洗浄して切り分けることから，特別な盛り付け方をするいくつかの準備段階の結果であるかもしれないが，熱を通すことは，この段階の一つではない。(2)日本の消費者は，刺身の質はそれが生であるという事実に直接関係していることを当然だと思っている。対照的に，他の文化では，昔からの考えで，肉や魚が食べられるようになるには，焼いたりあげたりするようなある種の調理が必要だということかもしれない。これらの文化では，刺身は生で美味しくて安全な食べ物だとは思われずに，むしろ調理されていないので，どういう味がするかに関係なく，おそらく安全な食べ物ではないと見なされている。新鮮な生卵は，日本で常食されているもう一つの生の食材で，例えばご飯にかけて，すき焼きの漬け汁などに使われるが，イギリスやアメリカのほとんどの人は，ニワトリの卵は，食用にするには，ある種の熱処理が必要だと信じている。

　しかしながら，他の文化から来た人がある食料を食べる方法は，多くの日本人にとって一般的ではないと考えられるかもしれない。例えば，リンゴやぶどうの皮を食べる日本人はほとんどいないだろう。この場合，食事の準備に関わる違いは，熱を使うことではなくて，食料の一部を取り除くことである。世界中の多くの人が，皮をむかずにリンゴやぶどうを食べる。ヨーロッパ人なら，(4)「木からとって食べるリンゴより，健康的でおいしい食べ方があるだろうか」と考えるかもしれない。しかし，この考え

方は，大多数の日本人には受け入れられない。

様々な文化には，特定の食事の調理に関する様々な慣習や，美味しいと考えられるものに様々な考えがあることは明らかだ。しかしながら，日常的な昔ながらの調理法，あるいは時に，ある食事の調理過程を抜かすことが，科学的観点から安全ではないことに疑いはない。生の魚や肉がどれほど美味しくても，サナダムシのように，たいてい発見できない有害な寄生虫の卵を含んでいる可能性があるからだ。もし生卵がきちんと保管されておらずに，長い間消費されていないままなら，サルモネラ菌のようなバクテリアを容易に作り出すことができる。サルモネラ菌によって引き起こされる中毒は，たいてい入院までは必要としないが，幼い子供や高齢者にはとても危険なものになる可能性がある。さらに，リンゴやぶどうの皮を食べることは、食物繊維の良い供給源になるかもしれないが，多くの有機栽培ではない果物を昆虫から守るのにつかわれている殺虫剤をも摂取してしまうリスクがある。よって、文化を越えて「好みは説明できない」かもしれないが、安全性は異なる問題で、私たちはいつも文化的に受け入れられている食料の生産方法や消費方法に関わるリスクを意識すべきだ。

第２講　重要語彙リスト　　＊一つ一つ何度も繰り返して，覚えてください

1	exposure	さらすこと
2	innate	先天的な
3	biological	生物学的な
4	assumption	前提，思い込み
5	highlight	強調する
6	ingredient	材料
7	edible	食べられる
8	preparation	準備
9	peel	皮をむく
10	foodstuff	食品
11	objectively	客観的に
12	witness	目撃する
13	presentation	盛り付け
14	consumer	消費者
15	take it for granted that ～	～を当然だと思う
16	be related to	～に関係している
17	raw	生の
18	by contrast	対照的に
19	conventional	慣習的な
20	regardless of	～に関係なく
21	dip	漬ける
22	skin	皮
23	be involved in	～に関係する
24	from a ～ point of view	～な観点から
25	parasite	寄生虫
26	undetectable	発見できない
27	hospitalization	入院
28	dietary fiber	食物繊維
29	run a risk	リスクをおかす
30	insecticide	殺虫剤
31	organically	有機に
32	insect	昆虫
33	account for	説明する

第２講　音読用白文　①　②　③　④　⑤　⑥　⑦　⑧　⑨　⑩

Everybody wants to eat delicious and safe food. However, exposure to different cultures reveals how people’s attitudes towards food safety and taste are not all innate or biological. Assumptions and practices regarding the preparation and presentation of food highlight the influence of culture on what and how people eat. For example, in one culture, some kinds of fresh ingredients might be consider edible as they are, that is, without any kind of preparation like washing, peeling or heating. Yet in another culture, the same foodstuff may require some kind of preparation before it can be eaten.

It is often difficult for people from the same culture to view such activities and beliefs objectively, and so witnessing the food practices of other cultures can be surprising. *Sashimi* is a great example of this. While *sashimi* may be the result of several steps of preparation — from cleaning and cutting, to a particular style of presentation — heating is not one of these steps. Japanese consumers take it for granted that the quality of *sashimi* is directly related to the fact that it is raw. By contrast, in other cultures, the conventional belief may be that meat and fish require some sort of cooking, such as baking or frying, in order for them to be considered edible. In these cultures, *sashimi* is not thought of as raw, delicious and safe to eat, but rather as uncooked, and therefore possibly unsafe to eat, regardless of how it may taste. Fresh chicken eggs are another raw foodstuff commonly eaten in Japan — as a topping for rice, or as a dipping sauce for *sukiyaki*, for example — but most people in the UK or the USA believe that chicken eggs require some kind of heating before they are fit for human consumption.

However, the ways in which people from other cultural backgrounds eat certain foods might be considered equally unconventional by many Japanese. For example, few Japanese would eat the skin of apples or grapes. In this case, the difference involved in the preparation of the food is not the use of heat, but the removal of part of the foodstuff. People in much of the world eat apples and grapes without peeling them. A European might think, ‘What could be more healthy and delicious than picking an apple from the tree and eating it?’ But this way of thinking is not shared by a large number of Japanese.

It is clear that different cultures have different conventions regarding the preparation of particular foods, and different beliefs about what is considered delicious. However, there is no question that some common food preparation practices — or sometimes a lack of certain food preparation processes — are unsafe from a scientific point of view. However delicious they may be, raw meat and fish can contain the eggs of harmful parasites like tapeworms, which are often undetectable. If chicken eggs are not properly stored, and are left unconsumed for a long time, they can easily produce bacteria like salmonella. The poisoning caused by salmonella does not usually require hospitalization, but it can be very dangerous for young children and elderly people. In addition, while eating the skin of apples and grapes may be a good source of dietary fiber, one also runs the risk of consuming insecticides, the poisons that are used to protect many non-organically farmed fruits from insects. So, while there may be ‘no accounting for taste’ beyond culture, safety is a different issue, and we should always be aware of the risks involved with culturally accepted methods of food production and consumption.

第３講　　解答

＜解答＞

問１　全訳の下線部（1），（3）を参照。

問２　慣れた道を通ると，かかった時間が実際よりも短く感じられる心理的効果。

問３　④　　　　問４　④

問５　（　ア　）①　　（　イ　）①　　（　ウ　）②　　（　エ　）②

問６　（　カ　）②　　（　キ　）①　　（　ク　）①　　（　ケ　）②

＜全訳＞

自動車運転手には，ある共通の経験が存在する。それは，新しい場所に車で行くと遅刻してしまうということだ。あなたがなじみのない道路を運転していると，全てが自分に不利に働くように思える。たとえば他の車，道路のレイアウト，信号や自殺行為のような自転車利用者でさえ自分に不利に働くように思えるのだ。ほんの数マイルであるとわかっているが，永遠であるかのように思える。

心理学的には，あらゆる種類のものが旅を実際よりも長く見せているが，そのうちの一つを取り出してみよう。道に不慣れであることだ。

知らない道は, 私たちの好奇心を最も高める。そこには新しい名前, 景色, ランドマークがたくさんあり，その全てが興味をかきたてる。(1)<u>私たちの注意がこの全ての目新しさに関係しているという事実は，私たちがどれほどの時間が経過したかと考えるその度合に，かすかな影響を与える。</u>

その理由を確かめるために，ちょっとだけ反対の見方をしてみよう。とてもなじみのある道を運転することを考えてみよう。通勤の道のり，街へのお出かけや家への帰り道だ。たとえそれが何であれ，自分の手の甲の様にすみからすみまで知っているだろう。この類の移動では，実際の運転から意識が容易にそれて，通り過ぎていく景色にほとんど注意を払わない。結果として，その移動には，実際よりも時間がかからないと感じてしまう。

これは，慣れた道の効果だ。つまり，人々は，慣れた道を移動するのにかかる時間を過小評価してしまう。容易にわかることは，慣れない道はより長く時間がかかるように思えることだ。

その効果は，私たちの注意を分散させる仕組みによって引き起こされる。私たちがよく知っている道を移動すると，あまり集中しなくてもよいので，時間がより速く過ぎるように思える。そして後になって，それを振り返ってみると，その移動をよく思

い出せないのは，あまり注意を払っていなかったからだ。そこで，私たちはそれが比例して短かったと思い込む。

　慣れた道の効果は，不思議な影響をもたらす。慣れた道を移動するのにどれくらい時間がかかるか見積もると，たいていはそれを過小評価してしまうだろう。それをよく知っているので，移動時間は実際よりも短く感じてしまう。このことが意味するのは，慣れた道を移動すると，この影響の調節をしないと，遅刻する可能性が高くなるということだ。

　実際，慣れた道の効果は，日常の活動が，どれくらい時間がかかるかを過小評価する傾向にあるという事実の明確な例となる。(3)あるいは，逆の言い方をすると，時間が速く過ぎるように思えるのは，無意識な日課となっている仕事をしているときなのだ。

　このことが意味するのは，たいてい休日の最後の部分が，最初の部分よりも早く過ぎる傾向にあると，人々が感じているということだ。それは，休日が進むにつれて，私たちは慣れて当たり前のことになり，時間はその終わりに向かってより早く過ぎるように思えるからだ。

　同じことが仕事でも起きる。その場合，人々は毎日の活動を，より慎重で高い注意を必要とする活動と比べて，より時間がかからないと報告する。

　すると，移動する道のりや，休日や仕事に慣れ親しんでいると，時間の認識が速くなる傾向にある。

　おそらくこのこと全てが，私たちの生活の後半部分，すなわち日常的で予測可能な出来事でいっぱいになる可能性が高いものが，なぜ幼年期よりもずっと速く過ぎていくように思えるのかを説明するのに役立つ。人生の道のりが歩き慣れたものになるにつれて，私たちは景色により注意を払わなくなる。

　これを避ける一つの方法は，自分をより予想外で予測不可能な経験にさらすことだが，くれぐれも遅刻せずに，渋滞につかまらないように。

第３講　重要語彙リスト　　＊一つ一つ何度も繰り返して，覚えてください

1	motorist	運転手
2	traffic light	信号
3	suicidal	自殺志願の
4	isolate	孤立させる
5	curiosity	好奇心
6	landscape	景色
7	be engaged with	～と関係している
8	subtle	かすかな
9	opposite	反対の
10	perspective	展望
11	commute	通勤
12	twist and turn	曲がりくねり
13	scenery	景色
14	consequence	結果
15	perceive	認識する
16	underestimate	過小評価する
17	concentrate	集中する
18	afterwards	後になって
19	assume	思いこむ
20	proportionately	比例して
21	odd	奇妙な，不思議な
22	estimate	見積もる
23	specific	明確な
24	put the other way round	逆の言い方をすると
25	settle	落ち着く
26	deliberate	慎重な
27	conscious	意識のある
28	the latter	後者の
29	be likely to	～しそうだ
30	predictable	予測できる
31	take notice of	～に気付く
32	expose	さらす
33	get stuck in	～で動けなくなる

第３講　音読用白文　①　②　③　④　⑤　⑥　⑦　⑧　⑨　⑩

Here’s a common experience for motorists: you are driving somewhere new and you’re late. As you drive down unfamiliar roads it seems that everything is conspiring against you: other cars, layout, the traffic lights and even suicidal cyclists. You know it’s only a few more miles, but it seems to be taking forever.

Psychologically there are all sorts of things going on to make the journey seem longer than it really is, but let’s just isolate one of those: the unfamiliarity of the route.

Unknown routes peak our curiosity; they are filled with new names, landscapes and landmarks, all of which attract the interest. The fact that our attention is engaged with all this newness has a subtle effect on how much time we think has passed.

To see why, let’s take the opposite perspective for a moment. Think about driving a route that’s very familiar. It could be your commute to work, a trip into town or the way home. Whichever it is, you know every twist and turn like the back of your hand. On these sorts of trips it’s easy to zone out from the actual driving and pay little attention to the passing scenery. The consequence is that you perceive that the trip has taken less time than it actually has.

This is the well-travelled road effect: people tend to underestimate the time it takes to travel a familiar route. The corollary is that unfamiliar routes seem to take longer.

The effect is caused by the way we allocate our attention. When we travel down a well-known route, because we don’t have to concentrate much, time seems to flow more quickly. And afterwards, when we come to think back on it, we can’t remember the journey well because we didn’t pay much attention to it. So we assume it was proportionately shorter.

The well-travelled road effect has an odd consequence. When you estimate how long it takes to travel a familiar route, typically you’ll underestimate it. Because of its familiarity the travelling time feels shorter than it really is. This means that when you travel a familiar route, unless you adjust for this effect,

you're more likely to be late.

Actually the well-travelled road effect is a specific example of the fact that we tend to underestimate how long routine activities take. Or, put the other way around: time seems to fly when we're engaged in automatic, routine tasks.

This means that people often find the last part of their holiday tends to go quicker than the first part. That's because as the holiday goes on, we settle into a routine, so time seems to go quicker towards the end.

The same happens at work, where people report routine activities as taking proportionately less time than those that require more deliberate, conscious attention.

Familiarity, then, with routes travelled, holidays and work activities, tends to speed up our perception of time.

Maybe this all helps explain why the latter parts of our lives — which are more likely to be filled with routine, predictable events — seem to skip by much quicker than our earlier years. As the roads of our lives become well-worn we take less notice of the landscape.

One way to avoid this is to expose yourself to more unexpected, unpredictable experiences...but probably not being late and getting stuck in traffic.

第４講　解答

＜解答＞

ポイント【1】

（解答例）

I agree with this statement. Of course, boxing is generally recognized as a sport and gives people dreams. Moreover, one of the only legitimate ways to getting out of slum lives is boxing. However, we have to consider some points.

First, the objective of boxing is to hurt opponents. It is morally inappropriate.

Second, boxers may suffer from facial injuries, brain damage and broken bones. They could also die.

For these reasons, I think that boxing and other sports based on physical violence should have no place in the Olympics.（90 words）

ポイント【2】

（解答例）

The tendency to read fewer books is growing because we have many types of media other than books. For example, we can get more information faster and cheaper on the Internet than from books. Also, watching videos on such media as TV, movies, and the Internet is more fun than reading books. However, we should remember the following negative effects of not reading books.

One book alone can tell us about someone’s entire life. Unlike videos, books can also let us imagine various worlds. Without books, we could not develop our imagination.（92 words）

ポイント【3】

（解答例）

The 2020 Tokyo Olympics will have positive effects. People around the world will buy tickets for the Games. Also, many tourists will use money in Japan, for example, to eat and drink as well as to use accommodation facilities.

However, the Olympics will also have negative effects. Cities may have to borrow huge amounts of money as many previous hosts did. It took years to repay all the debts.（69 words）

ポイント【4】

（解答例）

I don't think people would be happier if they could live forever. Of course, we could have a whole range of experiences, meet many all sorts of people and go everywhere. However, these are less important than the negative aspects of eternal life.

First, we can feel satisfied and happy because our lives are finite. If we could live forever, we would not feel thankful or moved. Second, we would have to face the deaths of our family members and friends.

For these reasons, I don't think immortality would make us happier.（92 words）

復習テスト　解答

＜第 1 講＞

1. ③	2. ②	3. ④	4. ①	5. ④
6. ①	7. ③	8. ②	9. ④	

復習テスト　解答

＜第 2 講＞

1. ④　2. ①　3. ③　4. ③　5. ①
6. ④　7. ②　8. ④　9. ②

復習テスト　解答

＜第 3 講＞

1. ①	2. ④	3. ③	4. ②	5. ④
6. ①	7. ③	8. ④	9. ④	

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